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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/756,884      | 01/14/2004  | Laurent Desclos      | 024833-1305         | 3424             |

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EXAMINER

CAO, HUEDUNG X

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/756,884

Applicant(s)

DESCLOS ET AL.

Examiner

Huedung X. Cao

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 23-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, and 7-10 is/are rejected.
- 7) ☒ Claim(s) 4-6 and 11-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**TAN HO**  
**PRIMARY EXAMINER**

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This is a reply to the Applicants' response to the Restriction Requirement submitted on September 28<sup>th</sup>, 2005. In virtue of this response, Invention Group I including claims 1-22 is elected.

For convenience in review and for clarity of the record of the file, part of the Restriction Requirement is being provided herewith:

#### ***Election/Restrictions***

2. This application contains claims directed to the following patentably distinct species of the claimed invention:

I. Claims 1-22, drawn to an antenna which includes a planar conductor, two elongated conductors.

II. Claims 23-30, drawn to an antenna which includes a substrate, two planar conductors, two elongated conductors.

III. Claims 31-34, drawn on an antenna which includes a substrate, an antenna element, two elongated conductors.

IV. Claims 35-37, drawn on an antenna which includes a substrate, one planar conductor and two elongated conductors located substantially in the E-plane.

Art Unit: 2821

3. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

***Response to Applicants' Election without traverse***

4. Applicant's election without traverse of Invention Group I including claims 1-22, in the reply filed on September 28<sup>th</sup>, 2005 is acknowledged.

5. Claims 22- 37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected groups II, III, and IV there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on September 28<sup>th</sup>, 2005.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Flint et al. (US 2002/0190905 A1).

Regarding claim 1, Flint (figure 14) teaches an antenna comprising: a first planar conductor 1401; a first elongated conductor 1301 and a second elongated conductor (feed), which are each substantially coplanar with the planar conductor; the first elongated conductor having a first end electrically connected to the first planar

Art Unit: 2821

conductor and a second end; and the second elongated conductor, parallel to the first elongated conductor and spaced apart therefrom, having a first end electrically connected to the first planar conductor see figure 14.

Regarding claim 2, Flint teaches the first end of the first elongated conductor is electrically connected to the first planar conductor by a first connecting conductor and the first end of the second elongated conductor is electrically connected to the first planar conductor by a second connecting conductor see paragraph [0018].

Regarding claim 3, Flint teaches the first connecting conductor and the second connecting conductor are perpendicular to the first elongated conductor and second elongated conductor respectively see figure 14.

Regarding claim 7, Flint teaches a substrate and wherein the first planar conductor, the first elongated conductor, and the second elongated conductor are disposed on a first side of the substrate see paragraph [0056].

Regarding claim 8, Flint teaches a substrate and wherein the first planar conductor is disposed on a first side of the substrate and the first elongated conductor and the second elongated conductor are disposed on a second side of the substrate see figure 15.

Regarding claim 9, Flint teaches a second planar conductor disposed on the second side of the substrate see figure 15.

Regarding claim 10, Flint teaches first end of the first elongated conductor and the first end of the second elongated conductor are electrically connected to the first planar conductor by vias through the substrate see figure 14.

***Allowable Subject Matter***

8. Claims 4-6, 11-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the Prior art fails to teach that a third elongated conductor space apart from the first planar conductor and electrically connected to at least one of the first end of the first elongated conductor and the first end of the second elongated conductor; the first elongated conductor and the second elongated conductor comprise a first element and further wherein the antenna comprises a second element; a substrate and at least one conductor along an edge of the substrate; a primary substrate, a secondary substrate attached to the primary substrate and perpendicular thereto, and a third parallel elongated conductor and a fourth parallel elongated conductor on the secondary substrate, each having a first end electrically connected to the first planar conductor; the first planar conductor, the first elongated conductor, and the second elongated conductors are disposed on a first side of a substrate and further comprising a second planar conductor and a third parallel elongated conductor and a fourth parallel elongated conductor each having a first end electrically connected to the second planar conductor and disposed on a second side of the substrate.

Art Unit: 2821

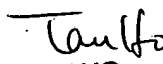
***Inquiries***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huedung Cao whose telephone number is (571) 272-1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Cao  
Patent Examiner

  
**TAN HO**  
**PRIMARY EXAMINER**